An Overview of the Department of Defense Energy Program

National Defense Industrial Association

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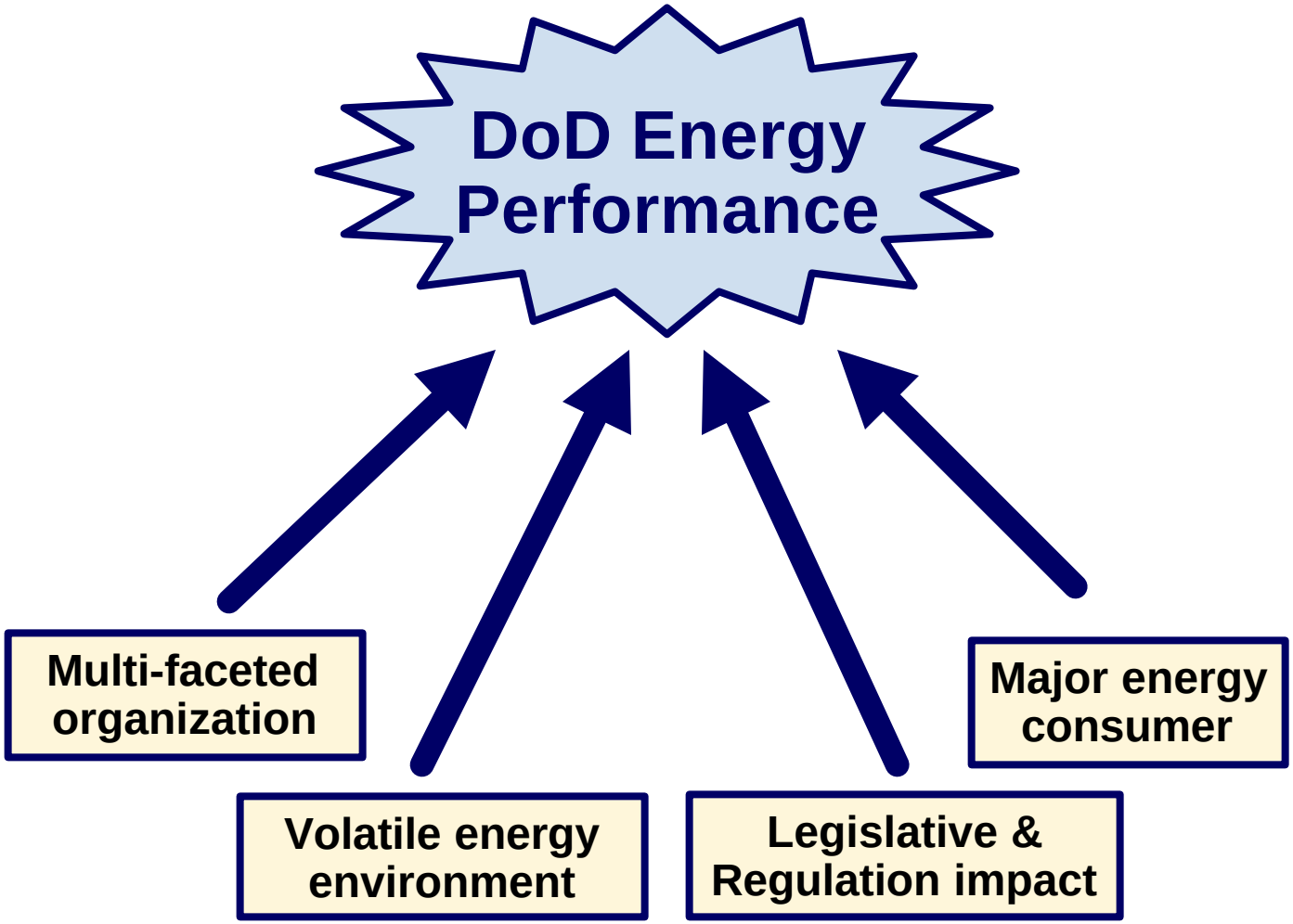
A Stressing Situation



Statistics – DoD Performance
Risk of Complacency

Goals	Performance
Building energy per GSF	25.4%
↓ 30% by 2005; 35% by 2010	
Industrial / lab energy	21.7%
↓ 20% by 2005; 25% by 2010	

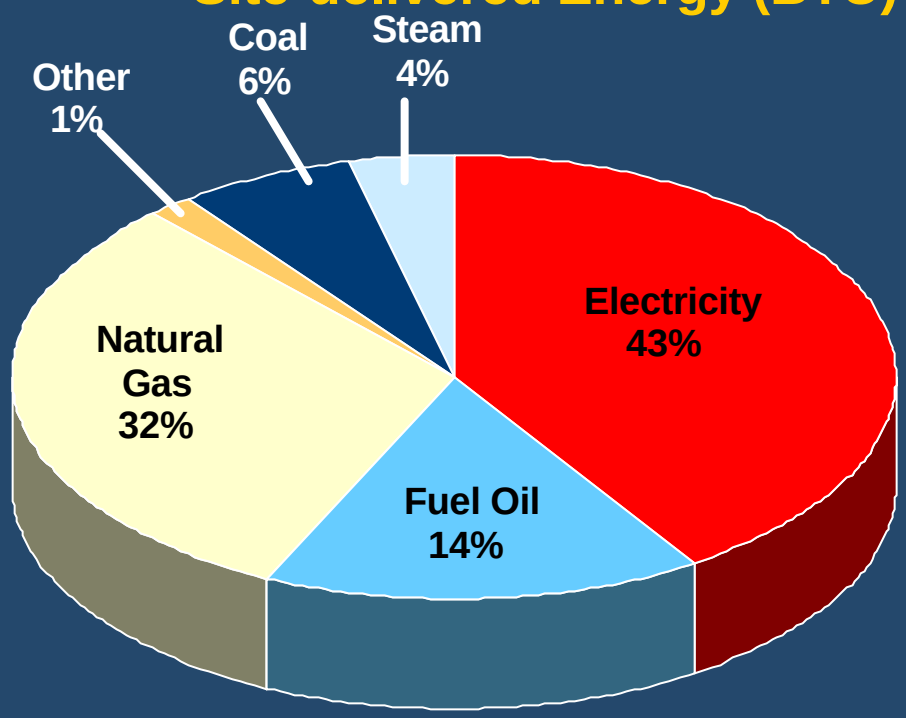
Renewal Energy Use	BBTU	(% of Total Usage)
Self-generated	2483	(1.01%)
Purchased	1528	(0.62%)
TOTAL	4011	(1.64%)

Performance Recognition

Presidential	DoD→ 3 of 5 awards
FEMP Awards	DoD→ 29 of 54 awards (Army 13; DON 12; AF 4)
Federal Energy Saver Showcase Facilities	DoD→ 9 of 19 designations

FY02 Installation Energy Use

Site-delivered Energy (BTU)



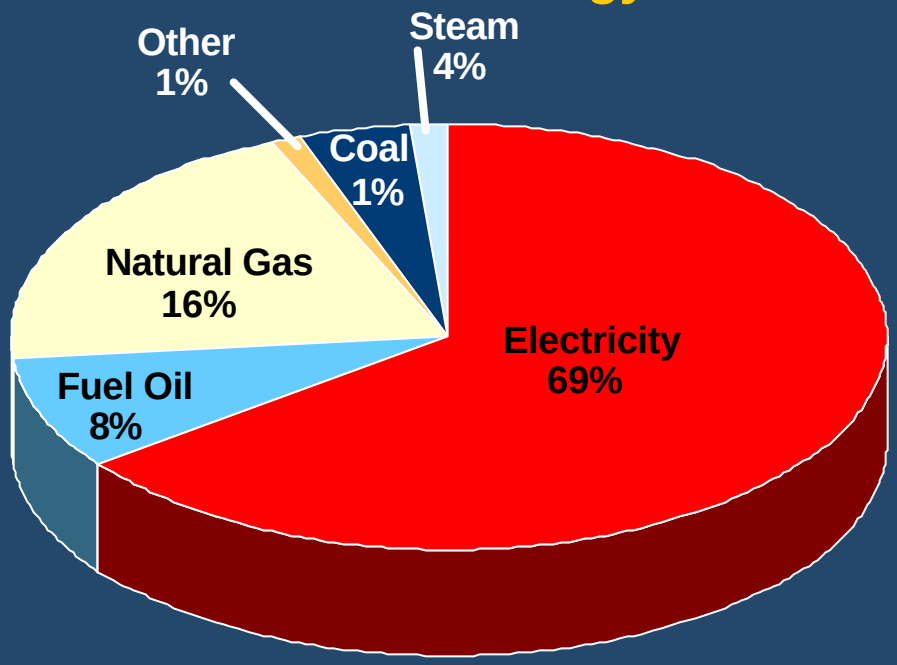
Consumption $ 7.1 B

Vehicles/Ships	70%
Buildings / Facilities	30%

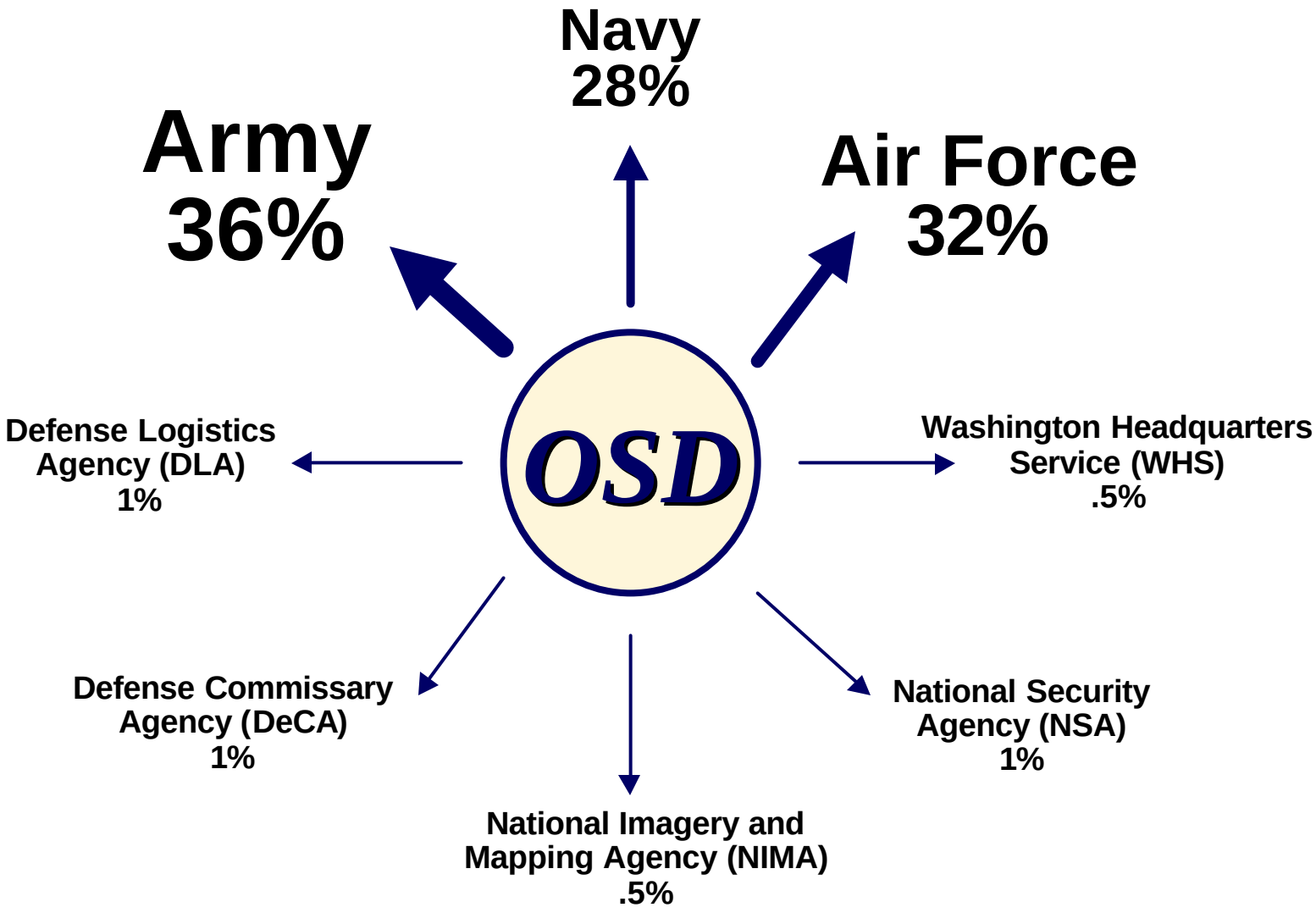
DoD Infrastructure

Value	$600 B
Buildings & structures	621,850
Square miles	46,425

Cost of Energy



Military Services and Defense Agencies (Buildings)



Utilities and Energy Management

Vision

100 % reliability of utility services to the Warfighter

Utilities and Energy Management

Grand Challenges	Mission	Vision
Modernize Infrastructure Increase utility and energy conservation and demand reduction Improve energy flexibility	Ensure that the DoD utility infrastructure is secure, safe, reliable and efficient, that energy and water commodities are procured effectively and efficiently, and that the components maximize energy and water conservation efforts.	100 % reliability of utility services to the Warfighter

Utilities and Energy Management

Goals	Grand Challenges	Mission	Vision
Utilities Privatization By 2005	Modernize Infrastructure	Ensure that the DoD utility infrastructure is secure, safe, reliable and efficient, that energy and Water commodities are procured effectively and efficiently, and that the components maximize energy and water conservation efforts.	100 % reliability of utility services to the Warfighter
Investments • ECIP • ESPC • UESC • Sustainable Development	Increase utility and energy conservation and demand reduction		
• Renewable Energies • Distributive Energy Resources (DER) • Alternative fuels	Improve energy flexibility		

DoD ENERGY POLICY

Initiatives

Actions

- Issue guidance
- Demonstrate benefit of program
- High %age of privatization
- Technology (better data)
- Right people involved

Implement appropriate Destributive Energy Resources

Embrace Sustainable Design
- LCC Analysis
- W B Design Guide

Enhance recognition
- Showcase facilities
- Awards
- Training

Establish metering policy
- Benchmarking
- Accuracy in accounting/billing
- Energy Star Buildings

Promote renewable energy
- Purchases
- Self-generated

Pursue energy funding
- Congressional appropriations
- Private sector investments

Increase efficiency products use
- Energy Star
- Alternative fuels

Strategies

- Align Services with working group/guidance
- Ensure proficiency in carrying out program
- Execute program efficiently and effectively

Implement conservation measures and reduce cost

Achieve / increase energy awareness

Expand use of renewable energy

Ensure DoD standards
Focus on going from utility privatization to utility management

Improve Energy
- Efficiency
- Development
- Investment

Goals

Successfully Complete utility privatization by 2005

Bring all systems to C2 level

Sound Stewardship In manage-ment of systems

Reduce energy consumption

Reduce greenhouse gases

Expand use of renewable energy

Grand Challenges

Modernize Infrastructure

Increase utility and energy conservation and demand reduction

Improve energy flexibility

Mission

Ensure that the DoD utility infrastructure is secure, safe, reliable and efficient, that energy and Water commodities are procured effectively and efficiently, and that the components maximize energy and water conservation efforts.

Vision

100 % reliability of utility services to the Warfighter

Benchmarking for Success

Private Industry

DoD

Private Agencies

Best practices in energy

- Allows cooperative environment to share “best in class”
- Provides reference point for comparison of performance / lessons learned
- Facilitates process improvement

This is a Team Effort

Grand Challenges

Modernize Infrastructure

- Utilities Privatization
- Best Practices
- Innovation
- Industry core competencies

Increase utility and energy conservation and demand reduction

- Metering
- Showcase Programs
- Energy Conferences / Steering Groups / Working Groups
- Facility Energy Audits
- Water Efficiencies

Improve energy flexibility

- Alternative Fuel Vehicles
- Energy Security
- Renewable Energy Development